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Rev. 1

Dwyer 8/9/05

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FLUOR

Memorandum

M8141-SLF-05-195

To: S. J. Trent A0-21 Date: April 26, 2005

From: S. L. Fitzgerald, Manager WSCF Analytical Chemistry

cc: w/Attachments w/o Attachments
T. F. Dale S3-28 D. J. Hart S3-30
H. K. Meznarich S3-30 M. A. Neely S3-30
P. D. Mix S3-30 H. S. Rich S3-28
J. E. Trechter S3-30 L. C. Swanson E6-35
File/LB

Subject: CORRECTED NARRATIVES FOR SAMPLE DELIVERY GROUPS (SDGs) 20050506,
20050508 AND 20050520, 100-LW-1/LW-2 CHARACTERIZATION – SAF NUMBER
F03-025

Reference: (1) Memos, SL Fitzgerald to SJ Trent, transmitting Sample Delivery Groups WSCF20050506,
WSCF20050508 and WSCF20050520 dated April 7, 2005 (M8141-SLF-05-169, 170 and
171)

Narratives transmitted to you on April 7 (Reference 1) contained an erroneous comment about the pH. As a result, we are asking you to replace the original pages with the corrected attachments. If you have any questions, don't hesitate to call Pauline Mix (telephone 372-1458) for assistance. Sorry for the inconvenience.

SLF/grf

Attachments 3

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M8141-SLF-05-171

ATTACHMENT 1

NARRATIVE

**Consisting of 9 pages
Including cover page**

| | |
|------------------------------|-----------------------|
| Sample Delivery Group | WSCF20050520 |
| Sample Matrix | Soil |
| Sample Visual | N/A |
| SAF Number | F03-025 |
| Data Deliverable | Summary Report |

Introduction

One (1) 200-LW-1/LW-2 Characterization (Soil), 216-Z-7, 117.5' – 120', sample (B19410) was received at the WSCF Laboratory on March 4, 2005. The sample was analyzed for the analytes indicated on the three attached copy of the chains of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter.

The narrative (Attachment 1) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 2) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information. Copies of the chain of custody and sample receipt are included as Attachment 3.

Analytical Methodology for Requested Analyses

Inorganic

- Ammonia by EPA Method 300.7. Analytical work was performed with no deviations to the approved method.
- Anions by EPA Method 300. Analytical work was performed with no deviations to the approved method.
- Cyanide by EPA Method 335.2. Analytical work was performed with no deviations to the approved method.
- ICP-AES Metals by EPA Method 6010B. Analytical work was performed with no deviations to the approved method.
- ICP-MS Metals by EPA Method 200.8. Analytical work was performed with no deviations to the approved method.
- Percent Solids by EPA Method 160.3. Analytical work was performed with no deviations to the approved method.
- pH by EPA Method 150.1. Analytical work was performed with no deviations to the approved method.

Organic

- Alcohols/Glycols by EPA Method 8015. Analytical work was performed with no deviations to the approved method.
- PCBs by EPA Method 8082B. Analytical work was performed with no deviations to the approved method.
- Semi-VOA by EPA Method 8270C. Analytical work was performed with no deviations to the approved method.
- TPH Diesel Range by WDOE Method NWTPH-Dx. Analytical work was performed with no deviations to the approved method.
- TPH Gas Range by WDOE Method NWTPH-Gx. Analytical work was performed with no deviations to the approved method.
- VOA by EPA Method 8260B. Analytical work was performed with no deviations to the approved method.

Radiochemistry

- All RadChem analyses (AEA (Americium, Neptunium, Plutonium and Uranium) and GEA) were run by internal WSCF procedures. Analytical work was performed with no deviations to the approved method.

Inorganic Comments

Ammonia - The hold time for this analysis was met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spike Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 14 for QC details. Analytical Note:

All QC controls are within the established limits.

Anions - The hold times for Nitrite and Nitrate analysis were not met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See pages 15 through 16 for QC details.

Analytical Notes:

- Preparation Date: 07-mar-2005.
- Duplicate, Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19402 (SDG# 20050329, SAF# F03-025).
- Chloride and Nitrate - Sample results were B-flagged; the analytes were less than the reportable detection limits, but greater than or equal to the method detection limits.

- Nitrate – The Duplicate Relative Percent Difference exceeded established laboratory limits. The RPD criterion does not apply to low level samples.

All other QC controls are within the established limits.

Cyanide - The hold time for this analysis was met. A Blank, Preparation Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 17 for QC details. Analytical Notes:

- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B1CDB6 (SDG# 20050445, SAF# F02-008).
- The Matrix Spike and Matrix Spike Duplicate QC recoveries were below established laboratory limits. The sample result was less than the detection limit and U-flagged.

All other QC controls are within the established limits.

ICP-AES Metals (Bismuth only) – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 18 for QC details. Analytical Notes:

- Preparation Date: 08-mar-2005.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19409 (SDG# 20050506, SAF# F03-025).
- Boron: Although not included in the Data Summary Report (not requested per chain of custody), the sample result was less than the minimum detection limit (MDL = 2.2 ppm).

All QC controls are within the established limits.

ICP-MS Metals – The hold time for this analysis was met. A Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 19 through 21 for QC details. Analytical Notes:

- Preparation Date: 07-mar-2005.
- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19408 (SDG# 20050508, SAF# F03-025).
- Silver - Matrix spike and Matrix Spike Duplicate recoveries were biased low; sample result was E-flagged.
- Antimony – The Laboratory Control Sample recovery exceeded established laboratory limits, but was within manufacturer's specifications.
- Barium, Mercury and Uranium - The analytes detected in the associated preparation Blank sample were evaluated and there was no significant effect on the sample result.

All other QC controls are within the established limits.

Percent Solids – analyzed for organic moisture correction.

pH - The hold time for this analysis was met. All laboratory QC controls are within the established limits. See page 22 for QC details.

- Duplicate QC sample was analyzed on sample# B19409 (SDG# 20050506, SAF# F03-025).

Organic Comments

- Sample results are moisture corrected and reported on dry weight basis.

Alcohol/Glycols - The hold time for this analysis were met. A Blank, Duplicate, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 26 for QC details. Analytical Note:

- Preparation Date: 16-mar-2005.

All QC controls are within the established limits.

PCBs - The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 27 through 28 for QC details. Analytical Notes:

- Preparation Date: 07-mar-2005.

All QC controls are within the established limits.

Semi-VOA – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 29 through 32 for QC details. Analytical Notes:

- Preparation Date: 07-mar-2005.

All QC controls are within the established limits.

TPHD-WA - The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 33 for QC details. Analytical Notes:

- Preparation Date: 07-mar-2005.

All QC controls are within the established limits.

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R. Hayes

5/2/05

TPHG-WA - The hold time for this analysis was met. A Blank, Laboratory Control Sample, Duplicate, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per GRP Letter of Instruction. See page 34 for QC details. Analytical Note:

- Preparation Date: 07-mar-2005.
- Duplicate, Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19408 (SDG# 20050508, SAF# F03-025).

All QC controls are within the established limits.

VOA – The hold time for this analysis was met. A Blank, Laboratory Control Sample, Matrix Spike and Matrix Spiked Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 35 through 37 for QC details. Analytical Note:

- Matrix Spike and Matrix Spike Duplicate QC samples were analyzed on sample# B19409 (SDG# 20050506, SAF# F03-025).

All QC controls are within the established limits.

Radiochemistry Comments

RadChem – There are no hold times associated with WSCF's radiochemical methods. A Blank, Laboratory Control Sample and Duplicate were analyzed with each delivery group per the GRP Letter of Instruction. See pages 39 through 43 for QC details. Analytical Notes:

- Duplicate QC samples (AEA [Americium, Neptunium, Plutonium and Uranium]) were analyzed on sample# B19409 (SDG# 20050506, SAF# F03-025).
- Eu-155 (GEA) - Duplicate Relative Percent Difference was above established limits. The RPD criterion does not apply to low level sample activity.
- Neptunium-237 –Laboratory control sample (LCS) recovery was below established limits and may be attributed to a slight excess of ascorbic acid which occurs due to low iron levels in the matrix and causes retention of the Neptunium during separation. The solid matrix sample spike recoveries however, were within established laboratory limits. Sample result is considered to be an estimate. Radiochemical Matrix Spike Recovery Data are summarized below.

| Radiochemical Matrix Spike Recovery | | | |
|--|---------------|---------|------------------------------------|
| Sample Number | Lab Sample ID | Isotope | Matrix Spike Recovery (Percent) |
| <u>Neptunium-237</u> | | | |
| LCS DUPLICATE | | Np-237 | 40.8 |

| Radiochemical Matrix Spike Recovery | | | |
|-------------------------------------|---------------|---------|------------------------------------|
| Sample Number | Lab Sample ID | Isotope | Matrix Spike Recovery (Percent) |
| B19410 | W050000860 | Np-237 | 95.3 |
| B19409 | W050000833 | Np-237 | 84.0 |
| DUPLICATE | W050000833 | Np-237 | 88.9 |

- Uranium-234, Uranium-235 and Plutonium-238 - Additional Batch QC Data are summarized below:

| Additional Batch QC Data (Results) | | | | |
|------------------------------------|---------------|---------|-----------------------|------|
| Sample Number | Lab Sample ID | Isotope | Results (pCi/gram) | QC |
| <u>Uranium-234/ Uranium-235</u> | | | | |
| BLANK | | U-234 | 3.443E-02 | |
| BLANK | | U-235 | 4.176E-03 | |
| B19409 | W050000833 | U-234 | 1.542E-01 | |
| DUPLICATE | W050000833 | U-234 | 1.786E-01 | 14.7 |
| B19409 | W050000833 | U-235 | 2.131E-02 | |
| DUPLICATE | W050000833 | U-235 | 9.848E-03 | 73.6 |
| <u>Plutonium-238</u> | | | | |
| BLANK | | Pu-238 | 2.508E-02 | |
| B19409 | W050000833 | Pu-238 | 4.319E-01 | |
| DUPLICATE | W050000833 | Pu-238 | 4.150E-01 | 4.0 |

- Plutonium-242, Americium-243 and Uranium-232 – Radiochemical Tracer Recovery Data are summarized below:

| Radiochemical Tracer Recovery | | | |
|-------------------------------|---------------|---------|---------------------------|
| Sample Number | Lab Sample ID | Isotope | Tracer Recovery (Percent) |
| <u>Plutonium-242</u> | | | |
| BLANK | | Pu-242 | 75.1 |
| LCS | | Pu-242 | 81.9 |
| B19410 | W050000860 | Pu-242 | 75.9 |
| B19409 | W050000833 | Pu-242 | 52.5 |
| DUPLICATE | W050000833 | Pu-242 | 86.5 |
| <u>Americium-243</u> | | | |
| BLANK | | Am-243 | 68.5 |
| LCS | | Am-243 | 82.2 |
| B19410 | W050000860 | Am-243 | 93.4 |
| B19409 | W050000833 | Am-243 | 93.1 |
| DUPLICATE | W050000833 | Am-243 | 80.2 |
| <u>Uranium-232</u> | | | |
| BLANK | | U-232 | 93.1 |
| LCS | | U-232 | 78.2 |
| B19410 | W050000860 | U-232 | 89.1 |
| B19409 | W050000833 | U-232 | 79.2 |
| DUPLICATE | W050000833 | U-232 | 92.9 |

This Summary Report is in compliance with the SOW, both technically and for completeness. Release of the data contained in this hard copy report has been authorized by the WSCF Laboratory Analytical Manager and Client Services, as verified by the following signature.



Pauline D. Mix
WSCF Client Services

Abbreviations

| | |
|--|------------------------------------|
| Hg – mercury | Am – americium |
| IC – ion chromatography | Cm - curium |
| ICP – inductively coupled plasma | Pu – plutonium |
| ICP/AES – ICP/atomic emission spectroscopy | Np – neptunium |
| ICP/MS – ICP/mass spectrometry | GEA – gamma energy analysis |
| Total U – total uranium | H3 – Tritium |
| AT/TB – total alpha/total beta | Sr – Strontium 89, 90 |
| AEA – Alpha Energy Analysis | WTPH-D – Total Hydrocarbons-Diesel |
| WTPH-G – Total Hydrocarbons-Gasoline | TSS – Total Suspended Solids |

M8141-SLF-05-171

ATTACHMENT 2

ANALYTICAL RESULTS

**Consisting of 41 pages
Including cover page**

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: SD - ADTICB 4.7.05

Client Services: CDH - P.D.Mix 4/7/2005

All results are reported on an "as received" basis unless otherwise noted in the comment section.

Confidentiality Notice: The information contained in this report is privileged and confidential information intended only for the use of the addressee. If the reader of this report is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone at (509) 373-7020.

Contract#: FH-EIS-2003-MEM-001

Report#: WSCF20050520

Report Date: 5-apr-2005

Report WGPP/ver. 1.1

Groundwater Remediation Program

Page 1

WSCF

ANALYTICAL RESULTS REPORT

Attention:
Project:

Steve Trent
F03-025: F03-025

Group #: WSCF20050520

| Sample # | Client ID | CAS # | Test Performed | Matrix | WSCF Method | RQ | Result | Unit | DF | MDL | Analyze Sample Receive | | |
|------------------|-----------|-------|----------------|------------|----------------------|------|------------|------|---------|-------|------------------------|-------|----------------------------|
| Inorganic | | | | | | | | | | | | | |
| W050000860 | B19410 | GRP | TRENT | 57-12-5 | Cyanide | SOIL | LA-695-402 | U | < 0.200 | mg/kg | 1.00 | 0.20 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | NH4-N | Nitrogen in ammonium | SOIL | LA-503-401 | U | < 0.200 | mg/kg | 50.00 | 0.20 | 03/18/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | TS | Total solids | SOIL | LA-519-412 | | 92.5 | % | 1.00 | 0.0 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | PH | pH Measurement | SOIL | LA-212-411 | | 8.78 | pH | 1.00 | 0.010 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 16984-48-8 | Fluoride | SOIL | LA-533-410 | U | < 1.13 | mg/kg | 49.00 | 1.1 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 18887-00-6 | Chloride | SOIL | LA-533-410 | U | < 2.55 | mg/kg | 49.00 | 2.5 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | NO2-N | Nitrogen in Nitrite | SOIL | LA-533-410 | U | < 0.931 | mg/kg | 49.00 | 0.93 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | NO3-N | Nitrogen in Nitrate | SOIL | LA-533-410 | B | 1.47 | mg/kg | 49.00 | 0.84 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | P04-P | Phosphate (P) by IC | SOIL | LA-533-410 | U | < 2.85 | mg/kg | 49.00 | 2.8 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 14808-79-8 | Sulfate | SOIL | LA-533-410 | B | 5.40 | mg/kg | 49.00 | 4.9 | 03/07/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-69-9 | Bismuth | SOIL | LA-505-411 | U | < 2.19 | mg/kg | 99.36 | 2.2 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-02-0 | Nickel | SOIL | LA-505-412 | | 9.58 | mg/kg | 9.87 | 4.9 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-22-4 | Silver | SOIL | LA-505-412 | E | 2.44 | mg/kg | 9.87 | 2.0 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-38-0 | Antimony | SOIL | LA-505-412 | U | < 4.94 | mg/kg | 9.87 | 4.9 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-39-3 | Barium | SOIL | LA-505-412 | | 74.8 | mg/kg | 9.87 | 2.0 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-41-7 | Beryllium | SOIL | LA-505-412 | U | < 2.96 | mg/kg | 9.87 | 3.0 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-43-9 | Cadmium | SOIL | LA-505-412 | U | < 0.987 | mg/kg | 9.87 | 0.99 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-47-3 | Chromium | SOIL | LA-505-412 | | 7.58 | mg/kg | 9.87 | 3.0 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-50-8 | Copper | SOIL | LA-505-412 | | 7.35 | mg/kg | 9.87 | 4.9 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7439-92-1 | Lead | SOIL | LA-505-412 | U | < 11.8 | mg/kg | 9.87 | 12 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7439-97-6 | Mercury | SOIL | LA-505-412 | U | < 0.987 | mg/kg | 9.87 | 0.99 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-61-1 | Uranium | SOIL | LA-505-412 | U | < 0.987 | mg/kg | 9.87 | 0.99 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7440-38-2 | Arsenic | SOIL | LA-505-412 | | 5.53 | mg/kg | 9.87 | 3.0 | 03/08/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 7782-49-2 | Selenium | SOIL | LA-505-412 | U | < 2.96 | mg/kg | 9.87 | 3.0 | 03/08/05 03/04/05 03/04/05 |

MDL=Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

E - Analyte is an estimate, has potentially larger errors

RQ=Result Qualifier

U - Analyzed for but not detected above limiting criteria.

DF=Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

13
of
55

Page 5

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: Ammonia (N) by IC

SAF Number: F03-025
 Sample Date: 03/04/05
 Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|--|-------------------|-----------|----------|----------|---------|---------------|-------------|-------------|----|
| Lab ID: W050000860 | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | |
| DUP | Ammonia (N) by IC | 7664-41-7 | <2.00e-1 | n/a | RPD | 03/18/05 | 0.000 | 20.000 | U |
| MS | Ammonia (N) by IC | 7664-41-7 | 2.32e-01 | 56.311 | % Recov | 03/18/05 | 75.000 | 125.000 | * |
| MSD | Ammonia (N) by IC | 7664-41-7 | 2.38e-01 | 57.767 | % Recov | 03/18/05 | 75.000 | 125.000 | * |
| BATCH QC | | | | | | | | | |
| BLANK | Ammonia (N) by IC | 7664-41-7 | <4.00e-3 | n/a | mg/L | 03/18/05 | 0.000 | 30.000 | U |
| BLANK | Ammonia (N) by IC | 7664-41-7 | <4.00e-3 | n/a | mg/L | 03/18/05 | 0.000 | 30.000 | U |
| LCS | Ammonia (N) by IC | 7664-41-7 | 8.22e+01 | 89.757 | % Recov | 03/18/05 | 80.000 | 120.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: Anions by Ion Chromatography

SAF Number: F03-025

Sample Date: 02/08/05

Receive Date: 02/08/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000473

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|-----|---------------------|------------|----------|---------|---------|----------|--------|---------|---|
| DUP | Chloride | 16887-00-6 | <2.80e0 | n/a | RPD | 03/07/05 | 0.000 | 20.000 | U |
| DUP | Fluoride | 16984-48-8 | 2.11e+00 | n/a | RPD | 03/07/05 | 0.000 | 20.000 | |
| DUP | Nitrogen in Nitrite | NO2-N | <9.50e-1 | n/a | RPD | 03/07/05 | 0.000 | 20.000 | U |
| DUP | Nitrogen in Nitrate | NO3-N | 3.38e+00 | 31.904 | RPD | 03/07/05 | 0.000 | 20.000 | |
| DUP | Phosphate (P) by IC | PO4-P | <2.70e0 | n/a | RPD | 03/07/05 | 0.000 | 20.000 | U |
| DUP | Sulfate | 14808-79-8 | <5.00e0 | n/a | RPD | 03/07/05 | 0.000 | 20.000 | U |
| MS | Chloride | 16887-00-6 | 9.90e-01 | 99.000 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MS | Fluoride | 16984-48-8 | 4.49e-01 | 90.881 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MS | Nitrogen in Nitrite | NO2-N | 4.60e-01 | 92.000 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MS | Nitrogen in Nitrate | NO3-N | 4.28e-01 | 94.900 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MS | Phosphate (P) by IC | PO4-P | 7.83e-01 | 78.741 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MS | Sulfate | 14808-79-8 | 1.97e+00 | 98.500 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MSD | Chloride | 16887-00-6 | 9.89e-01 | 98.900 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MSD | Fluoride | 16984-48-8 | 4.43e-01 | 89.878 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MSD | Nitrogen in Nitrite | NO2-N | 4.93e-01 | 98.600 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MSD | Nitrogen in Nitrate | NO3-N | 4.55e-01 | 100.887 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MSD | Phosphate (P) by IC | PO4-P | 8.34e-01 | 119.828 | % Recov | 03/07/05 | 75.000 | 125.000 | |
| MSD | Sulfate | 14808-79-8 | 1.97e+00 | 98.500 | % Recov | 03/07/05 | 75.000 | 125.000 | |

BATCH QC

| | | | | | | | | | |
|-------|---------------------|------------|----------|-----|------|----------|-------|---------|---|
| BLANK | Chloride | 16887-00-6 | <5.20e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Chloride | 16887-00-6 | <5.20e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Fluoride | 16984-48-8 | <2.30e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Fluoride | 16984-48-8 | <2.30e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Nitrogen in Nitrite | NO2-N | <1.90e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Nitrogen in Nitrite | NO2-N | <1.90e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: Anions by Ion Chromatography

SAF Number: F03-025

Sample Date:

Receive Date:

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------------------|------------|----------|----------|---------|---------------|-------------|-------------|----|
| BLANK | Nitrogen in Nitrate | NO3-N | <1.30e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Nitrogen in Nitrate | NO3-N | <1.30e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Phosphate (P) by IC | PO4-P | <5.40e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Phosphate (P) by IC | PO4-P | <6.40e-2 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Sulfate | 14808-79-8 | <1.00e-1 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| BLANK | Sulfate | 14808-79-8 | <1.00e-1 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| LCS | Chloride | 16887-00-6 | 2.02e+02 | 101.000 | % Recov | 03/07/05 | 80.000 | 120.000 | |
| LCS | Fluoride | 16984-48-8 | 1.00e+02 | 101.317 | % Recov | 03/07/05 | 80.000 | 120.000 | |
| LCS | Nitrogen in Nitrite | NO2-N | 9.81e+01 | 98.100 | % Recov | 03/07/05 | 80.000 | 120.000 | |
| LCS | Nitrogen in Nitrate | NO3-N | 8.24e+01 | 91.454 | % Recov | 03/07/05 | 80.000 | 120.000 | |
| LCS | Phosphate (P) by IC | PO4-P | 1.79e+02 | 92.363 | % Recov | 03/07/05 | 80.000 | 120.000 | |
| LCS | Sulfate | 14808-79-8 | 3.71e+02 | 92.982 | % Recov | 03/07/05 | 80.000 | 120.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: Cyanide by Midi/Spectrophotom

SAF Number: F03-025

Sample Date: 02/24/05

Receive Date: 02/24/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000710

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|---------|-------------------------------|---------|--------|--------|---------|----------|--------|---------|---|
| MS | Cyanide by Midi/Spectrophotom | 57-12-5 | 41.7 | 41.700 | % Recov | 03/07/05 | 75.000 | 125.000 | • |
| MSD | Cyanide by Midi/Spectrophotom | 57-12-5 | 73.0 | 73.000 | % Recov | 03/07/05 | 75.000 | 125.000 | • |
| SPK-RPD | Cyanide by Midi/Spectrophotom | 57-12-5 | 73.000 | 54.577 | RPD | 03/07/05 | 0.000 | 20.000 | • |

BATCH QC

| | | | | | | | | | |
|-----------|-------------------------------|---------|------|--------|---------|----------|--------|---------|---|
| BLANK | Cyanide by Midi/Spectrophotom | 57-12-5 | <4 | n/a | ug/L | 03/07/05 | -4.000 | 4.000 | U |
| BLNK-PREP | Cyanide by Midi/Spectrophotom | 57-12-5 | <0.2 | n/a | ug/L | 03/07/05 | -4.000 | 4.000 | U |
| LCS | Cyanide by Midi/Spectrophotom | 57-12-5 | 96.1 | 96.100 | % Recov | 03/07/05 | 85.000 | 115.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: ICP Metals Analysis, Grd H2O P

SAF Number: F03-025

Sample Date: 03/03/05

Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000833

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|---------|---------|-----------|--------|--------|---------|----------|--------|---------|--|
| MS | Bismuth | 7440-69-9 | 172 | 86.432 | % Recov | 03/08/05 | 75.000 | 125.000 | |
| MSD | Bismuth | 7440-69-9 | 172 | 88.660 | % Recov | 03/08/05 | 75.000 | 125.000 | |
| SPK-RPD | Bismuth | 7440-69-9 | 88.660 | 2.545 | RPD | 03/08/05 | 0.000 | 20.000 | |

BATCH QC

| | | | | | | | | | |
|-------|---------|-----------|---------|--------|---------|----------|--------|---------|---|
| BLANK | Bismuth | 7440-69-9 | <2.2e-2 | n/a | ug/L | 03/08/05 | | | U |
| LCS | Bismuth | 7440-69-9 | 189 | 94.975 | % Recov | 03/08/05 | 80.000 | 120.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: F03-025

Sample Date: 02/22/05

Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|--|-----------|-----------|----------|----------|---------|---------------|-------------|-------------|----|
| Lab ID: W050000835 | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | |
| MS | Silver | 7440-22-4 | 304.7 | 76.175 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Arsenic | 7440-38-2 | 402.1 | 100.525 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Barium | 7440-39-3 | 383.45 | 95.862 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Beryllium | 7440-41-7 | 390.3 | 97.575 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Cadmium | 7440-43-9 | 402.9 | 100.725 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Chromium | 7440-47-3 | 391.3 | 97.825 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Copper | 7440-50-8 | 379.4 | 94.850 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Mercury | 7439-97-6 | 21.94 | 109.700 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Nickel | 7440-02-0 | 377.02 | 94.255 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Lead | 7439-92-1 | 389.4 | 97.350 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Antimony | 7440-36-0 | 430.6 | 107.650 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Selenium | 7782-49-2 | 426 | 106.500 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MS | Uranium | 7440-61-1 | 407.3 | 101.825 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Silver | 7440-22-4 | 267.1 | 66.775 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Arsenic | 7440-38-2 | 385.1 | 96.275 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Barium | 7440-39-3 | 356.15 | 89.037 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Beryllium | 7440-41-7 | 372.6 | 93.150 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Cadmium | 7440-43-9 | 389.8 | 97.450 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Chromium | 7440-47-3 | 380.7 | 95.175 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Copper | 7440-50-8 | 374.9 | 93.725 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Mercury | 7439-97-6 | 21.21 | 106.050 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Nickel | 7440-02-0 | 358.62 | 89.655 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Lead | 7439-92-1 | 371.2 | 92.800 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Antimony | 7440-36-0 | 416.5 | 104.125 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Selenium | 7782-49-2 | 407.2 | 101.800 | % Recov | 03/08/05 | 70.000 | 130.000 | |
| MSD | Uranium | 7440-61-1 | 383.2 | 95.800 | % Recov | 03/08/05 | 70.000 | 130.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: F03-025

Sample Date: 02/22/05

Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|-----------------|-----------|-----------|----------|----------|---------|---------------|-------------|-------------|----|
| SPK-RPD | Silver | 7440-22-4 | 66.775 | 13.151 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Arsenic | 7440-38-2 | 96.275 | 4.319 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Barium | 7440-39-3 | 89.037 | 7.382 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Beryllium | 7440-41-7 | 93.150 | 4.640 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Cadmium | 7440-43-9 | 97.450 | 3.305 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Chromium | 7440-47-3 | 95.175 | 2.748 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Copper | 7440-50-8 | 93.725 | 1.193 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Mercury | 7439-97-8 | 106.050 | 3.384 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Nickel | 7440-02-0 | 89.655 | 5.002 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Lead | 7439-92-1 | 92.800 | 4.786 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Antimony | 7440-36-0 | 104.125 | 3.329 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Selenium | 7782-49-2 | 101.800 | 4.513 | RPD | 03/08/05 | 0.000 | 20.000 | |
| SPK-RPD | Uranium | 7440-61-1 | 95.800 | 6.097 | RPD | 03/08/05 | 0.000 | 20.000 | |
| BATCH QC | | | | | | | | | |
| BLANK | Silver | 7440-22-4 | 0.2 | 0.200 | ug/L | 03/08/05 | | | |
| BLANK | Arsenic | 7440-38-2 | <0.3 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Barium | 7440-39-3 | 0.31 | 0.310 | ug/L | 03/08/05 | | | |
| BLANK | Beryllium | 7440-41-7 | <0.3 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Cadmium | 7440-43-9 | <0.1 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Chromium | 7440-47-3 | <0.3 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Copper | 7440-50-8 | <0.5 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Mercury | 7439-97-8 | 0.12 | 0.120 | ug/L | 03/08/05 | | | |
| BLANK | Nickel | 7440-02-0 | <0.5 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Lead | 7439-92-1 | <1.2 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Antimony | 7440-36-0 | <0.5 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Selenium | 7782-49-2 | <0.3 | n/a | ug/L | 03/08/05 | | U | |
| BLANK | Uranium | 7440-61-1 | 0.11 | 0.110 | ug/L | 03/08/05 | | | |
| LCS | Silver | 7440-22-4 | 148.9 | 114.538 | % Recov | 03/08/05 | 110.000 | 170.000 | |
| LCS | Arsenic | 7440-38-2 | 179 | 111.180 | % Recov | 03/08/05 | 82.000 | 142.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: ICP-2008 MS All possible metal

SAF Number: F03-025

Sample Date:

Receive Date:

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|-----------|-----------|----------|----------|---------|---------------|-------------|-------------|----|
| LCS | Barium | 7440-39-3 | 269.5 | 106.944 | % Recov | 03/08/05 | 79.000 | 123.000 | |
| LCS | Beryllium | 7440-41-7 | 104.4 | 110.593 | % Recov | 03/08/05 | 82.000 | 128.000 | |
| LCS | Cadmium | 7440-43-9 | 145.8 | 113.906 | % Recov | 03/08/05 | 88.000 | 127.000 | |
| LCS | Chromium | 7440-47-3 | 71.79 | 103.295 | % Recov | 03/08/05 | 50.000 | 126.000 | |
| LCS | Copper | 7440-50-8 | 160.3 | 108.311 | % Recov | 03/08/05 | 61.000 | 134.000 | |
| LCS | Mercury | 7439-97-8 | 17.96 | 106.272 | % Recov | 03/08/05 | 75.000 | 114.000 | |
| LCS | Nickel | 7440-02-0 | 155.9 | 106.054 | % Recov | 03/08/05 | 84.000 | 125.000 | |
| LCS | Lead | 7439-92-1 | 156.8 | 110.423 | % Recov | 03/08/05 | 87.000 | 120.000 | |
| LCS | Antimony | 7440-36-0 | 131.1 | 215.271 | % Recov | 03/08/05 | 61.000 | 135.000 | |
| LCS | Selenium | 7782-49-2 | 78.26 | 121.900 | % Recov | 03/08/05 | 83.000 | 148.000 | |
| LCS | Uranium | 7440-61-1 | 377.9 | 94.475 | % Recov | 03/08/05 | 89.000 | 107.000 | |

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent **Group #:** WSCF20050520
Project: F03-025: F03-025

| Sample # | Client ID | CAS # | Test Performed | Matrix | WSCF Method | RQ | Result | Unit | DF | MDL | Analyze Sample Receive |
|----------------|-----------|-------|----------------|-------------|-----------------------------|------|------------|------|------------|-------|------------------------|
| Organic | | | | | | | | | | | |
| W050000860 | B19410 | GRP | TRENT | 107-21-1 | Ethylene glycol | SOIL | Organics | U | < 5.00e+03 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | TPHGASOLINE | Total Pet. Hydrocarbons Gas | SOIL | LA-523-443 | U | < 250 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 12674-11-2 | Aroclor-1016 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 11104-28-2 | Aroclor-1221 | SOIL | LA-523-427 | U | < 100 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 11141-18-5 | Aroclor-1232 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 53469-21-9 | Aroclor-1242 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 12672-29-6 | Aroclor-1248 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 11097-69-1 | Aroclor-1264 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 11098-82-5 | Aroclor-1280 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 37324-23-5 | Aroclor-1282 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 11100-14-4 | Aroclor-1288 | SOIL | LA-523-427 | U | < 52.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 100-02-7 | 4-Nitrophenol | SOIL | LA-523-456 | U | < 93.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 106-48-7 | 1,4-Dichlorobenzene | SOIL | LA-523-456 | U | < 140 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 108-95-2 | Phenol | SOIL | LA-523-456 | U | < 74.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 120-82-1 | 1,2,4-Trichlorobenzene | SOIL | LA-523-456 | U | < 98.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 121-14-2 | 2,4-Dinitrotoluene | SOIL | LA-523-456 | U | < 58.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 129-00-0 | Pyrene | SOIL | LA-523-456 | U | < 84.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 59-50-7 | 4-Chloro-3-methylphenol | SOIL | LA-523-456 | U | < 50.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 621-64-7 | N-Nitrosodi-n-dipropylamine | SOIL | LA-523-456 | U | < 80.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 83-32-9 | Acenaphthene | SOIL | LA-523-456 | U | < 74.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 87-88-5 | Pentachlorophenol | SOIL | LA-523-456 | U | < 78.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 95-57-8 | 2-Chlorophenol | SOIL | LA-523-456 | U | < 82.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 95-48-7 | 2-Methylphenol (cresol, o-) | SOIL | LA-523-456 | U | < 88.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 65794-96-9 | 3 & 4 Methylphenol Total | SOIL | LA-523-456 | U | < 110 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 126-73-8 | Tributyl phosphate | SOIL | LA-523-456 | U | < 76.0 | ug/kg | 1.00 |
| W050000860 | B19410 | GRP | TRENT | 75-35-4 | 1,1-Dichloroethene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 |

MDL=Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

E - Analyte is an estimate, has potentially larger errors

RQ=Result Qualifier

U - Analyzed for but not detected above limiting criteria.

DF=Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

Page 2

WSCF

ANALYTICAL RESULTS REPORT

Attention:
Project:

Steve Trent
F03-025: F03-025

Group #: WSCF20050520

| Sample # | Client ID | CAS # | Test Performed | Matrix | WSCF | | Result | Unit | DF | MDL | Analyze Sample Receive | | |
|------------|-----------|-------|----------------|------------|---------------------------|------|------------|------|--------|-------|------------------------|-----|----------------------------|
| | | | | | Method | RQ | | | | | | | |
| W050000860 | B19410 | GRP | TRENT | 79-01-6 | Trichloroethene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 71-43-2 | Benzene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 108-88-3 | Toluene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 108-90-7 | Chlorobenzene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 75-34-3 | 1,1-Dichloroethane | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 100-41-4 | Ethylbenzene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 100-42-5 | Styrene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 10061-01-5 | cis-1,3-Dichloropropene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 10061-02-6 | trans-1,3-Dichloropropene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 107-06-2 | 1,2-Dichloroethane | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 108-10-1 | 4-Methyl-2-Pentanone | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 124-48-1 | Dibromochloromethane | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 127-18-4 | Tetrachloroethene | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 1330-20-7 | Xylenes (total) | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 540-59-0 | 1,2-Dichloroethene(Total) | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 56-23-5 | Carbon tetrachloride | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 591-78-6 | 2-Hexanone | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 67-64-1 | Acetone | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 67-66-3 | Chloroform | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 71-55-6 | 1,1,1-Trichloroethane | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 74-83-9 | Bromomethane | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 74-87-3 | Chloromethane | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 75-00-3 | Chloroethane | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 75-01-4 | Vinyl chloride | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 75-09-2 | Methylenechloride | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 75-15-0 | Carbon disulfide | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 75-25-2 | Bromoform | SOIL | LA-523-455 | U | < 2.20 | ug/kg | 1.00 | 2.2 | 03/16/05 03/04/05 03/04/05 |

MDL = Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

E - Analyte is an estimate, has potentially larger errors

RQ = Result Qualifier

U - Analyzed for but not detected above limiting criteria.

DF = Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent **Group #:** WSCF20050520
Project: F03-025: F03-025

| Sample # | Client ID | CAS # | Test Performed | Matrix | WSCF Method | RQ | Result | Unit | DF | MDL | Analyze Sample Receive |
|------------|-----------|-------|----------------|-------------|--------------------------------|------|--------------|-------------|-------|------|-------------------------------------|
| W050000860 | B19410 | GRP | TRENT | 75-27-4 | Bromodichloromethane | SOIL | LA-523-455 U | < 2.20 | ug/kg | 1.00 | 2.2 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 78-87-5 | 1,2-Dichloropropane | SOIL | LA-523-455 U | < 2.20 | ug/kg | 1.00 | 2.2 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 78-93-3 | 2-Butanone | SOIL | LA-523-455 U | < 2.20 | ug/kg | 1.00 | 2.2 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 79-00-5 | 1,1,2-Trichloroethane | SOIL | LA-523-455 U | < 2.20 | ug/kg | 1.00 | 2.2 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 79-34-5 | 1,1,2,2-Tetrachloroethane | SOIL | LA-523-455 U | < 2.20 | ug/kg | 1.00 | 2.2 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 71-36-3 | 1-Butanol | SOIL | LA-523-455 U | < 43.0 | ug/kg | 1.00 | 43 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 104-51-8 | n-Butylbenzene | SOIL | LA-523-455 U | < 2.20 | ug/kg | 1.00 | 2.2 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | TPHDIESEL | Total Pet. Hydrocarbons Diesel | SOIL | NWTPH U | < 4.00e +03 | ug/kg | 1.00 | 4.0e +03 03/16/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | TPHKEROSENE | Kerosene | SOIL | NWTPH U | < 4.00e +03 | ug/kg | 1.00 | 4.0e +03 03/16/05 03/04/05 03/04/05 |

MDL = Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

E - Analyte is an estimate, has potentially larger errors

RQ = Result Qualifier

U - Analyzed for but not detected above limiting criteria.

DF = Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: Alcohols, Glycols - 8015

SAF Number: F03-025
 Sample Date: 03/04/05
 Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000860

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|---------|-----------------|----------|--------|--------|---------|----------|--------|---------|---|
| DUP | 2-Bromoethanol | 540-51-2 | 14700 | 0.678 | RPD | 03/16/05 | 0.000 | 25.000 | |
| DUP | Ethylene glycol | 107-21-1 | <5000 | n/a | RPD | 03/16/05 | 0.000 | 25.000 | U |
| MS | 2-Bromoethanol | 540-51-2 | 13500 | 91.216 | % Recov | 03/16/05 | 70.000 | 125.000 | |
| MS | Ethylene glycol | 107-21-1 | 10000 | 84.746 | % Recov | 03/16/05 | 75.000 | 125.000 | |
| MSD | 2-Bromoethanol | 540-51-2 | 12900 | 87.162 | % Recov | 03/16/05 | 70.000 | 125.000 | |
| MSD | Ethylene glycol | 107-21-1 | 11200 | 94.915 | % Recov | 03/16/05 | 75.000 | 125.000 | |
| SPK-RPD | 2-Bromoethanol | 540-51-2 | 87.162 | 4.545 | RPD | 03/16/05 | 0.000 | 20.000 | |
| SPK-RPD | Ethylene glycol | 107-21-1 | 94.915 | 11.320 | RPD | 03/16/05 | 0.000 | 20.000 | |

BATCH QC

| | | | | | | | | | |
|-------|-----------------|----------|-------|---------|---------|----------|--------|---------|---|
| BLANK | 2-Bromoethanol | 540-51-2 | 14000 | 0.875 | ug/Kg | 03/16/05 | 0.000 | 10.000 | |
| BLANK | Ethylene glycol | 107-21-1 | <5000 | n/a | ug/Kg | 03/16/05 | 0.000 | 5.000 | U |
| LCS | 2-Bromoethanol | 540-51-2 | 13000 | 104.000 | % Recov | 03/16/05 | 70.000 | 130.000 | |
| LCS | Ethylene glycol | 107-21-1 | 11000 | 110.000 | % Recov | 03/16/05 | 70.000 | 130.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: PCBs complete list

SAF Number: F03-025
 Sample Date: 03/04/05
 Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000860

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|---------|----------------------|------------|---------|---------|---------|----------|--------|---------|--|
| MS | Aroclor-1260 | 11096-82-5 | 1080.7 | 102.000 | % Recov | 03/15/05 | 75.000 | 125.000 | |
| MS | Decachlorobiphenyl | 2051-24-3 | 1153.9 | 109.000 | % Recov | 03/15/05 | 50.000 | 150.000 | |
| MS | Tetrachloro-m-xylene | 877-09-8 | 1074.1 | 102.000 | % Recov | 03/15/05 | 50.000 | 150.000 | |
| MSD | Aroclor-1260 | 11096-82-5 | 1061.4 | 100.000 | % Recov | 03/15/05 | 75.000 | 125.000 | |
| MSD | Decachlorobiphenyl | 2051-24-3 | 1151.1 | 109.000 | % Recov | 03/15/05 | 50.000 | 150.000 | |
| MSD | Tetrachloro-m-xylene | 877-09-8 | 1058.0 | 100.000 | % Recov | 03/15/05 | 50.000 | 150.000 | |
| SPK-RPD | Aroclor-1260 | 11096-82-5 | 100.000 | 1.980 | RPD | 03/15/05 | 0.000 | 25.000 | |
| SPK-RPD | Decachlorobiphenyl | 2051-24-3 | 108.000 | 0.000 | RPD | 03/15/05 | 0.000 | 20.000 | |
| SPK-RPD | Tetrachloro-m-xylene | 877-09-8 | 100.000 | 1.980 | RPD | 03/15/05 | 0.000 | 20.000 | |
| SURR | Decachlorobiphenyl | 2051-24-3 | 1122.2 | 108.000 | % Recov | 03/15/05 | 50.000 | 150.000 | |
| SURR | Tetrachloro-m-xylene | 877-09-8 | 1098.2 | 108.000 | % Recov | 03/15/05 | 50.000 | 150.000 | |

BATCH QC

| | | | | | | | | | |
|-------|----------------------|------------|--------|---------|---------|----------|--------|---------|--|
| BLANK | Aroclor-1016 | 12674-11-2 | < 54 | n/a | UGKG | 03/15/05 | | U | |
| BLANK | Aroclor-1221 | 11104-28-2 | < 110 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Aroclor-1232 | 11141-16-6 | < 54 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Aroclor-1242 | 53489-21-9 | < 54 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Aroclor-1248 | 12672-29-6 | < 54 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Aroclor-1254 | 11097-69-1 | < 54 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Aroclor-1260 | 11096-82-5 | < 54 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Aroclor-1262 | 37324-23-5 | < 54 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Aroclor-1268 | 11100-14-4 | < 54 | n/a | ug/Kg | 03/15/05 | | U | |
| BLANK | Decachlorobiphenyl | 2051-24-3 | 1067.2 | 98.700 | % Recov | 03/15/05 | 50.000 | 150.000 | |
| BLANK | Tetrachloro-m-xylene | 877-09-8 | 1075.8 | 99.500 | % Recov | 03/15/05 | 50.000 | 150.000 | |
| LCS | Aroclor-1260 | 11096-82-5 | 983.69 | 98.400 | % Recov | 03/15/05 | 70.000 | 130.000 | |
| LCS | Decachlorobiphenyl | 2051-24-3 | 1046.1 | 105.000 | % Recov | 03/15/05 | 50.000 | 150.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
Matrix: SOLID
Test: PCBs complete list

SAF Number: F03-025
Sample Date:
Receive Date:

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|----------------------|----------|----------|----------|---------|---------------|-------------|-------------|----|
| LCS | Tetrachloro-m-xylene | 877-09-8 | 984.11 | 98.400 | % Recov | 03/15/05 | 50.000 | 150.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-025
 Sample Date: 03/04/05
 Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|--|-----------------------------|------------|----------|----------|---------|---------------|-------------|-------------|----|
| Lab ID: W050000860 | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | |
| MS | 1,2,4-Trichlorobenzene | 120-82-1 | 1089.9 | 75.800 | % Recov | 03/14/05 | 46.000 | 107.000 | |
| MS | 1,4-Dichlorobenzene | 108-46-7 | 1080.6 | 73.800 | % Recov | 03/14/05 | 30.000 | 96.000 | |
| MS | 2,4-Dinitrotoluene | 121-14-2 | 944.11 | 65.700 | % Recov | 03/14/05 | 59.000 | 106.000 | |
| MS | 2-Fluorophenol | 367-12-4 | 1192.5 | 82.900 | % Recov | 03/14/05 | 42.000 | 105.000 | |
| MS | Acenaphthene | 83-32-9 | 1051.6 | 73.100 | % Recov | 03/14/05 | 61.000 | 118.000 | |
| MS | 4-Chloro-3-methylphenol | 59-50-7 | 1858.4 | 78.900 | % Recov | 03/14/05 | 61.000 | 106.000 | |
| MS | 2-Chlorophenol | 95-57-8 | 1813.8 | 74.800 | % Recov | 03/14/05 | 66.000 | 106.000 | |
| MS | N-Nitrosodi-n-dipropylamine | 621-64-7 | 1095.9 | 76.200 | % Recov | 03/14/05 | 71.000 | 114.000 | |
| MS | 2-Fluorobiphenyl | 321-60-8 | 1008.8 | 70.200 | % Recov | 03/14/05 | 56.000 | 122.000 | |
| MS | Phenol | 108-95-2 | 1714.1 | 78.500 | % Recov | 03/14/05 | 42.000 | 111.000 | |
| MS | Nitrobenzene-d5 | 4165-60-0 | 1004.1 | 59.800 | % Recov | 03/14/05 | 54.000 | 111.000 | |
| MS | 4-Nitrophenol | 100-02-7 | 1522.6 | 70.600 | % Recov | 03/14/05 | 32.000 | 118.000 | |
| MS | Pentachlorophenol | 87-86-5 | 1492.7 | 69.200 | % Recov | 03/14/05 | 62.000 | 114.000 | |
| MS | Phenol-d5 | 4165-62-2 | 1094.8 | 78.100 | % Recov | 03/14/05 | 54.000 | 120.000 | |
| MS | Pyrene | 129-00-0 | 1004.7 | 69.900 | % Recov | 03/14/05 | 68.000 | 118.000 | |
| MS | 2,4,8-Tribromophenol | 118-79-6 | 1022.1 | 71.100 | % Recov | 03/14/05 | 24.000 | 122.000 | |
| MS | Terphenyl-d14 (7Cl) | 98904-43-9 | 1000.9 | 69.600 | % Recov | 03/14/05 | 35.000 | 150.000 | |
| MSD | 1,2,4-Trichlorobenzene | 120-82-1 | 1120.5 | 78.200 | % Recov | 03/14/05 | 46.000 | 107.000 | |
| MSD | 1,4-Dichlorobenzene | 108-46-7 | 1083.6 | 76.600 | % Recov | 03/14/05 | 30.000 | 96.000 | |
| MSD | 2,4-Dinitrotoluene | 121-14-2 | 984.16 | 67.300 | % Recov | 03/14/05 | 59.000 | 106.000 | |
| MSD | 2-Fluorophenol | 367-12-4 | 1204.6 | 84.100 | % Recov | 03/14/05 | 42.000 | 105.000 | |
| MSD | Acenaphthene | 83-32-9 | 1083.2 | 75.600 | % Recov | 03/14/05 | 61.000 | 118.000 | |
| MSD | 4-Chloro-3-methylphenol | 59-50-7 | 1720.0 | 80.000 | % Recov | 03/14/05 | 61.000 | 106.000 | |
| MSD | 2-Chlorophenol | 95-57-8 | 1663.7 | 77.400 | % Recov | 03/14/05 | 66.000 | 106.000 | |
| MSD | N-Nitrosodi-n-dipropylamine | 621-64-7 | 1133.4 | 79.100 | % Recov | 03/14/05 | 71.000 | 114.000 | |
| MSD | 2-Fluorobiphenyl | 321-60-8 | 1021.2 | 71.300 | % Recov | 03/14/05 | 56.000 | 122.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-025
 Sample Date: 03/04/05
 Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------------------------|------------|----------|----------|---------|---------------|-------------|-------------|----|
| MSD | Phenol | 108-95-2 | 1748.4 | 81.300 | % Recov | 03/14/05 | 42.000 | 111.000 | |
| MSD | Nitrobenzene-d5 | 4165-60-0 | 1027.6 | 71.700 | % Recov | 03/14/05 | 64.000 | 111.000 | |
| MSD | 4-Nitrophenol | 100-02-7 | 1571.2 | 73.100 | % Recov | 03/14/05 | 32.000 | 118.000 | |
| MSD | Pentachlorophenol | 87-86-5 | 1524.1 | 70.900 | % Recov | 03/14/05 | 62.000 | 114.000 | |
| MSD | Phenol-d5 | 4165-62-2 | 1094.1 | 76.300 | % Recov | 03/14/05 | 54.000 | 120.000 | |
| MSD | Pyrene | 129-00-0 | 1052.2 | 73.400 | % Recov | 03/14/05 | 66.000 | 118.000 | |
| MSD | 2,4,6-Tribromophenol | 118-79-6 | 1025.4 | 71.800 | % Recov | 03/14/05 | 24.000 | 122.000 | |
| MSD | Terphenyl-d14 (7Cl) | 98904-43-9 | 1029.3 | 71.800 | % Recov | 03/14/05 | 35.000 | 150.000 | |
| SPK-RPD | 1,2,4-Trichlorobenzene | 120-82-1 | 78.200 | 3.117 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 1,4-Dichlorobenzene | 106-48-7 | 75.800 | 2.410 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 2,4-Dinitrotoluene | 121-14-2 | 67.300 | 2.406 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 2-Fluorophenol | 367-12-4 | 84.100 | 1.437 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | Acenaphthene | 83-32-9 | 75.800 | 3.362 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 4-Chloro-3-methylphenol | 59-50-7 | 80.000 | 3.952 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 2-Chlorophenol | 95-57-8 | 77.400 | 3.417 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | N-Nitrosodi-n-propylamine | 621-64-7 | 79.100 | 3.735 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 2-Fluorobiphenyl | 321-60-8 | 71.300 | 1.555 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | Phenol | 108-95-2 | 81.300 | 2.239 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | Nitrobenzene-d5 | 4165-60-0 | 71.700 | 2.686 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 4-Nitrophenol | 100-02-7 | 73.100 | 3.479 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | Pentachlorophenol | 87-86-5 | 70.900 | 2.427 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | Phenol-d5 | 4165-62-2 | 76.300 | 0.262 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | Pyrene | 129-00-0 | 73.400 | 4.885 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | 2,4,6-Tribromophenol | 118-79-6 | 71.600 | 0.701 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SPK-RPD | Terphenyl-d14 (7Cl) | 98904-43-9 | 71.800 | 3.112 | RPD | 03/14/05 | 0.000 | 20.000 | |
| SURR | 2-Fluorophenol | 367-12-4 | 1223.4 | 85.200 | % Recov | 03/14/05 | 42.000 | 105.000 | |
| SURR | 2-Fluorobiphenyl | 321-60-8 | 1039.1 | 72.300 | % Recov | 03/14/05 | 56.000 | 122.000 | |
| SURR | Nitrobenzene-d5 | 4165-60-0 | 1059.2 | 73.700 | % Recov | 03/14/05 | 64.000 | 111.000 | |
| SURR | Phenol-d5 | 4165-62-2 | 1124.8 | 78.300 | % Recov | 03/14/05 | 54.000 | 120.000 | |
| SURR | 2,4,6-Tribromophenol | 118-79-6 | 980.28 | 68.200 | % Recov | 03/14/05 | 24.000 | 122.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-025
 Sample Date: 03/04/05
 Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|-----------------|-----------------------------|------------|----------|----------|---------|---------------|-------------|-------------|----|
| SURR | Terphenyl-d14 (7Cl) | 98904-43-9 | 1006.4 | 70.000 | % Recov | 03/14/05 | 35.000 | 150.000 | |
| BATCH QC | | | | | | | | | |
| BLANK | 1,2,4-Trichlorobenzene | 120-82-1 | < 91 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 1,4-Dichlorobenzene | 106-48-7 | < 130 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 2,4-Dinitrotoluene | 121-14-2 | < 54 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 2-Fluorophenol | 367-12-4 | 1036.5 | 77.700 | % Recov | 03/14/05 | 42.000 | 105.000 | |
| BLANK | 2-Methylphenol (cresol, o-) | 95-48-7 | < 81 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 3 & 4 Methylphenol Total | 65794-95-9 | < 100 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | Acenaphthene | 83-32-9 | < 69 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 4-Chloro-3-methylphenol | 59-50-7 | < 47 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 2-Chlorophenol | 95-57-8 | < 76 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | N-Nitrosodi-n-dipropylamine | 621-64-7 | < 75 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 2-Fluorobiphenyl | 321-60-8 | 944.84 | 70.900 | % Recov | 03/14/05 | 56.000 | 122.000 | |
| BLANK | Phenol | 108-95-2 | < 69 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | Nitrobenzene-d5 | 4165-60-0 | 966.78 | 72.500 | % Recov | 03/14/05 | 64.000 | 111.000 | |
| BLANK | 4-Nitrophenol | 100-02-7 | < 86 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | Pentachlorophenol | 87-86-5 | < 73 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | Phenol-d5 | 4165-62-2 | 989.79 | 74.200 | % Recov | 03/14/05 | 54.000 | 120.000 | |
| BLANK | Pyrene | 129-00-0 | < 78 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | Tributyl phosphate | 126-73-8 | < 71 | n/a | ug/Kg | 03/14/05 | | | U |
| BLANK | 2,4,6-Tribromophenol | 118-79-6 | 827.64 | 62.100 | % Recov | 03/14/05 | 24.000 | 122.000 | |
| BLANK | Terphenyl-d14 (7Cl) | 98904-43-9 | 904.05 | 67.800 | % Recov | 03/14/05 | 35.000 | 150.000 | |
| LCS | 1,2,4-Trichlorobenzene | 120-82-1 | 999.98 | 75.000 | % Recov | 03/14/05 | 46.000 | 107.000 | |
| LCS | 1,4-Dichlorobenzene | 106-48-7 | 981.35 | 73.600 | % Recov | 03/14/05 | 42.000 | 111.000 | |
| LCS | 2,4-Dinitrotoluene | 121-14-2 | 908.93 | 68.200 | % Recov | 03/14/05 | 59.000 | 106.000 | |
| LCS | 2-Fluorophenol | 367-12-4 | 1110.0 | 83.300 | % Recov | 03/14/05 | 50.000 | 110.000 | |
| LCS | Acenaphthene | 83-32-9 | 964.09 | 72.300 | % Recov | 03/14/05 | 61.000 | 116.000 | |
| LCS | 4-Chloro-3-methylphenol | 59-50-7 | 1466.0 | 73.300 | % Recov | 03/14/05 | 61.000 | 106.000 | |
| LCS | 2-Chlorophenol | 95-57-8 | 1465.3 | 73.300 | % Recov | 03/14/05 | 66.000 | 106.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: SW-846 8270B Semi-Vols

SAF Number: F03-025
 Sample Date:
 Receive Date:

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------------------------|------------|----------|----------|----------|---------------|-------------|-------------|----|
| LCS | N-Nitrosodi-n-propylamine | 621-84-7 | 1006.4 | 75.500 | % Recov | 03/14/05 | 71.000 | 114.000 | |
| LCS | 2-Fluorobiphenyl | 321-60-8 | 953.67 | 71.500 | % Recov | 03/14/05 | 58.000 | 109.000 | |
| LCS | Phenol | 108-95-2 | 1542.9 | 77.100 | % Recov | 03/14/05 | 67.000 | 105.000 | |
| LCS | Nitrobenzene-d5 | 4185-60-0 | 952.83 | 71.500 | % Recov | 03/14/05 | 60.000 | 118.000 | |
| LCS | 4-Nitrophenol | 100-02-7 | 1230.7 | 61.500 | % Recov | 03/14/05 | 32.000 | 118.000 | |
| LCS | Pentachlorophenol | 87-88-5 | 1319.0 | 68.000 | % Recov | 03/14/05 | 62.000 | 114.000 | |
| LCS | Phenol-d5 | 4185-62-2 | 1005.5 | 75.400 | % Recov | 03/14/05 | 59.000 | 116.000 | |
| LCS | Pyrene | 128-00-0 | 930.24 | 69.800 | % Recov | 03/14/05 | 66.000 | 118.000 | |
| LCS | 2,4,6-Tribromophenol | 118-79-6 | 890.95 | 66.800 | % Recov. | 03/14/05 | 60.000 | 120.000 | |
| LCS | Terphenyl-d14 (7Cl) | 98904-43-9 | 929.02 | 69.700 | % Recov | 03/14/05 | 60.000 | 120.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: WTPH-D TPH Diesel Range (Wa)

SAF Number: F03-025

Sample Date: 03/04/05

Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000860

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|---------|--------------------------------|------|-----------|---------|---------|---------|----------|--------|---------|
| MS | ortho-Terphenyl | Surr | 84-15-1 | 26944 | 100.000 | % Recov | 03/16/05 | 70.000 | 130.000 |
| MS | Total Pet. Hydrocarbons Diesel | | TPHDIESEL | 139800 | 104.000 | % Recov | 03/16/05 | 75.000 | 125.000 |
| MSD | ortho-Terphenyl | Surr | 84-15-1 | 27090 | 101.000 | % Recov | 03/16/05 | 70.000 | 130.000 |
| MSD | Total Pet. Hydrocarbons Diesel | | TPHDIESEL | 142280 | 106.000 | % Recov | 03/16/05 | 75.000 | 125.000 |
| SPK-RPD | ortho-Terphenyl | Surr | 84-15-1 | 101.000 | 0.895 | RPD | 03/16/05 | 0.000 | 20.000 |
| SPK-RPD | Total Pet. Hydrocarbons Diesel | | TPHDIESEL | 106.000 | 1.905 | RPD | 03/16/05 | 0.000 | 20.000 |
| SURR | ortho-Terphenyl | Surr | 84-15-1 | 26731 | 99.100 | % Recov | 03/16/05 | 70.000 | 130.000 |

BATCH QC

| | | | | | | | | | |
|-------|--------------------------------|------|-------------|--------|--------|---------|----------|--------|---------|
| BLANK | Kerosene | | TPHKEROSENE | < 3800 | n/a | ug/Kg | 03/16/05 | | U |
| BLANK | ortho-Terphenyl | Surr | 84-15-1 | 24120 | 98.500 | % Recov | 03/16/05 | 70.000 | 130.000 |
| BLANK | Total Pet. Hydrocarbons Diesel | | TPHDIESEL | < 3800 | n/a | ug/Kg | 03/16/05 | | U |
| LCS | Kerosene | | TPHKEROSENE | 114580 | 91.700 | % Recov | 03/16/05 | 70.000 | 130.000 |
| LCS | ortho-Terphenyl | Surr | 84-15-1 | 24960 | 99.800 | % Recov | 03/16/05 | 70.000 | 130.000 |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: NWTPH-GX TPH Gasoline Range

SAF Number: F03-025

Sample Date: 02/22/05

Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000835

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|---------|-----------------------------|-------------|---------|---------|---------|----------|--------|---------|---|
| DUP | Total Pet. Hydrocarbons Gas | TPHGASOLINE | <250 | n/a | RPD | 03/07/05 | 0.000 | 20.000 | U |
| MS | Total Pet. Hydrocarbons Gas | TPHGASOLINE | 4000 | 111.111 | % Recov | 03/07/05 | 50.000 | 150.000 | |
| MSD | Total Pet. Hydrocarbons Gas | TPHGASOLINE | 3800 | 100.000 | % Recov | 03/07/05 | 50.000 | 150.000 | |
| SPK-RPD | Total Pet. Hydrocarbons Gas | TPHGASOLINE | 100.000 | 10.526 | RPD | 03/07/05 | 0.000 | 20.000 | |

BATCH QC

| | | | | | | | | | |
|-------|-----------------------------|-------------|------|---------|---------|----------|--------|---------|---|
| BLANK | Total Pet. Hydrocarbons Gas | TPHGASOLINE | <250 | n/a | mg/L | 03/07/05 | 0.000 | 300.000 | U |
| LCS | Total Pet. Hydrocarbons Gas | TPHGASOLINE | 3800 | 110.145 | % Recov | 03/07/05 | 85.000 | 115.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: VOA Ground Water Protection

SAF Number: F03-025

Sample Date: 03/03/05

Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000833

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|---------|-----------------------|------------|---------|---------|---------|----------|--------|---------|--|
| MS | 1,1-Dichloroethene | 75-35-4 | 23.480 | 93.900 | % Recov | 03/15/05 | 63.000 | 117.000 | |
| MS | Benzene | 71-43-2 | 24.400 | 97.800 | % Recov | 03/15/05 | 75.000 | 129.000 | |
| MS | 4-Bromofluorobenzene | 460-00-4 | 49.480 | 99.000 | % Recov | 03/15/05 | 84.000 | 116.000 | |
| MS | Chlorobenzene | 108-90-7 | 24.400 | 97.600 | % Recov | 03/15/05 | 79.000 | 119.000 | |
| MS | 1,2-Dichloroethane-d4 | 17060-07-0 | 55.280 | 111.000 | % Recov | 03/15/05 | 82.000 | 136.000 | |
| MS | Toluene-d8 | 2037-26-5 | 52.310 | 105.000 | % Recov | 03/15/05 | 89.000 | 119.000 | |
| MS | Toluene | 108-88-3 | 25.880 | 104.000 | % Recov | 03/15/05 | 76.000 | 120.000 | |
| MS | Trichloroethene | 79-01-6 | 23.480 | 93.800 | % Recov | 03/15/05 | 73.000 | 123.000 | |
| MSD | 1,1-Dichloroethene | 75-35-4 | 23.190 | 92.800 | % Recov | 03/16/05 | 63.000 | 117.000 | |
| MSD | Benzene | 71-43-2 | 25.520 | 102.000 | % Recov | 03/16/05 | 75.000 | 129.000 | |
| MSD | 4-Bromofluorobenzene | 460-00-4 | 48.940 | 97.900 | % Recov | 03/16/05 | 84.000 | 116.000 | |
| MSD | Chlorobenzene | 108-90-7 | 25.560 | 102.000 | % Recov | 03/16/05 | 79.000 | 119.000 | |
| MSD | 1,2-Dichloroethane-d4 | 17060-07-0 | 53.970 | 108.000 | % Recov | 03/16/05 | 82.000 | 136.000 | |
| MSD | Toluene-d8 | 2037-26-5 | 52.410 | 105.000 | % Recov | 03/16/05 | 89.000 | 119.000 | |
| MSD | Toluene | 108-88-3 | 26.480 | 106.000 | % Recov | 03/16/05 | 76.000 | 120.000 | |
| MSD | Trichloroethene | 79-01-6 | 24.610 | 98.400 | % Recov | 03/16/05 | 73.000 | 123.000 | |
| SPK-RPD | 1,1-Dichloroethene | 75-35-4 | 92.800 | 1.178 | RPD | 03/16/05 | 0.000 | 25.000 | |
| SPK-RPD | Benzene | 71-43-2 | 102.000 | 4.409 | RPD | 03/16/05 | 0.000 | 25.000 | |
| SPK-RPD | 4-Bromofluorobenzene | 460-00-4 | 97.900 | 1.117 | RPD | 03/16/05 | 0.000 | 25.000 | |
| SPK-RPD | Chlorobenzene | 108-90-7 | 102.000 | 4.409 | RPD | 03/16/05 | 0.000 | 25.000 | |
| SPK-RPD | 1,2-Dichloroethane-d4 | 17060-07-0 | 108.000 | 2.740 | RPD | 03/16/05 | 0.000 | 25.000 | |
| SPK-RPD | Toluene-d8 | 2037-26-5 | 105.000 | 0.000 | RPD | 03/16/05 | 0.000 | 25.000 | |
| SPK-RPD | Toluene | 108-88-3 | 106.000 | 1.905 | RPD | 03/16/05 | 0.000 | 25.000 | |
| SPK-RPD | Trichloroethene | 79-01-6 | 98.400 | 4.787 | RPD | 03/16/05 | 0.000 | 25.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: VOA Ground Water Protection

SAF Number: F03-025

Sample Date: 03/04/05

Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|--|---------------------------|------------|----------|----------|---------|---------------|-------------|-------------|----|
| Lab ID: W050000860 | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | |
| SURR | 4-Bromofluorobenzene | 460-00-4 | 49.840 | 99.700 | % Recov | 03/16/05 | 71.000 | 125.000 | |
| SURR | 1,2-Dichloroethane-d4 | 17080-07-0 | 53.240 | 106.000 | % Recov | 03/16/05 | 80.000 | 134.000 | |
| SURR | Toluene-d8 | 2037-26-5 | 53.010 | 106.000 | % Recov | 03/16/05 | 80.000 | 126.000 | |
| BATCH QC | | | | | | | | | |
| BLANK | 1,1-Dichloroethane | 75-34-3 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1,1,1-Trichloroethane | 71-55-6 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1,1,2-Trichloroethane | 79-00-5 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1,1,2,2-Tetrachloroethane | 79-34-5 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1,1-Dichloroethene | 75-35-4 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1,2-Dichloroethane | 107-06-2 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1,2-Dichloroethene(Total) | 540-59-0 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1-Butanol | 71-36-3 | < 40 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 2-Hexanone | 591-78-6 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 4-Methyl-2-Pentanone | 108-10-1 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Acetone | 67-64-1 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Bromodichloromethane | 75-27-4 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Benzene | 71-43-2 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 4-Bromofluorobenzene | 460-00-4 | 50.870 | 101.000 | % Recov | 03/15/05 | 71.000 | 125.000 | |
| BLANK | Bromoform | 75-25-2 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | n-Butylbenzene | 104-51-8 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Carbon disulfide | 75-15-0 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Carbon tetrachloride | 56-23-5 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Dibromochloromethane | 124-48-1 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Chloroform | 67-66-3 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Chlorobenzene | 108-90-7 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | cis-1,3-Dichloropropene | 10061-01-5 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: VOA Ground Water Protection

SAF Number: F03-025

Sample Date:

Receive Date:

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------------------------|------------|----------|----------|---------|---------------|-------------|-------------|----|
| BLANK | Chloroethane | 75-00-3 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 1,2-Dichloroethane-d4 | 17060-07-0 | 51.830 | 104.000 | % Recov | 03/15/05 | 80.000 | 134.000 | U |
| BLANK | 1,2-Dichloropropane | 78-87-5 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Ethylbenzene | 100-41-4 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Bromomethane | 74-83-9 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Chloromethane | 74-87-3 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | 2-Butanone | 78-93-3 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Methylenechloride | 75-09-2 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Tetrachloroethane | 127-18-4 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Styrene | 100-42-5 | < 2.0 | n/a | ug/Kg | 03/15/06 | | | U |
| BLANK | Xylenes (total) | 1330-20-7 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Toluene-d8 | 2037-26-5 | 52.480 | 105.000 | % Recov | 03/15/05 | 80.000 | 126.000 | |
| BLANK | Toluene | 108-88-3 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | trans-1,3-Dichloropropene | 10061-02-6 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Trichloroethene | 79-01-6 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| BLANK | Vinyl chloride | 75-01-4 | < 2.0 | n/a | ug/Kg | 03/15/05 | | | U |
| LCS | 1,1-Dichloroethene | 75-35-4 | 23.580 | 94.300 | % Recov | 03/16/05 | 70.000 | 130.000 | |
| LCS | Benzene | 71-43-2 | 26.260 | 105.000 | % Recov | 03/16/05 | 70.000 | 130.000 | |
| LCS | 4-Bromofluorobenzene | 460-00-4 | 52.830 | 106.000 | % Recov | 03/16/05 | 71.000 | 125.000 | |
| LCS | Chlorobenzene | 108-90-7 | 26.260 | 105.000 | % Recov | 03/16/05 | 70.000 | 130.000 | |
| LCS | 1,2-Dichloroethane-d4 | 17060-07-0 | 53.890 | 108.000 | % Recov | 03/16/05 | 80.000 | 134.000 | |
| LCS | Toluene-d8 | 2037-26-5 | 52.540 | 105.000 | % Recov | 03/16/05 | 80.000 | 126.000 | |
| LCS | Toluene | 108-88-3 | 28.600 | 114.000 | % Recov | 03/16/05 | 70.000 | 130.000 | |
| LCS | Trichloroethene | 79-01-6 | 25.150 | 101.000 | % Recov | 03/16/05 | 70.000 | 130.000 | |

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent **Group #:** WSCF20050520
Project: F03-025: F03-025

| Sample # | Client ID | CAS # | Test Performed | Matrix | WSCF Method | RQ | Result | Unit | DF | MDL | Analyze Sample Receive | | |
|-----------------------|-----------|-------|----------------|------------|--------------------------------|------|------------|------|-----------|-------|------------------------|---------|----------------------------|
| Radiochemistry | | | | | | | | | | | | | |
| W050000860 | B19410 | GRP | TRENT | 14598-10-2 | Americium-241 | SOIL | LA-508-471 | | 0.770 | pCi/g | 1.00 | 0.012 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Am-241 by AEA Total Cntg Error | SOIL | LA-508-471 | + - | 0.18 | pCi/g | 1.00 | 0.0 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 10188-40-0 | Cobalt-60 | SOIL | LA-508-481 | | 0.0685 | pCi/g | 1.00 | 0.011 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Co-60 Rel. Count Error (GEA) | SOIL | LA-508-481 | + - | 0.018 | pCi/g | 1.00 | 0.0 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 10045-97-3 | Cesium-137 | SOIL | LA-508-481 | U | -1.52e-03 | pCi/g | 1.00 | 9.9e-03 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Cs-137 Rel. Count Error (GEA) | SOIL | LA-508-481 | + - | 6.7e-03 | pCi/g | 1.00 | 0.0 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 14683-23-9 | Europium-152 | SOIL | LA-508-481 | U | -0.0180 | pCi/g | 1.00 | 0.032 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Eu-152 Rel. Count Error (GEA) | SOIL | LA-508-481 | + - | 0.020 | pCi/g | 1.00 | 0.0 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 15585-10-1 | Europium-154 | SOIL | LA-508-481 | | 0.153 | pCi/g | 1.00 | 0.030 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Eu-154 Rel. Count Error (GEA) | SOIL | LA-508-481 | + - | 0.039 | pCi/g | 1.00 | 0.0 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 14391-16-3 | Europium-155 | SOIL | LA-508-481 | | 0.0817 | pCi/g | 1.00 | 0.046 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Eu-155 Rel. Count Error (GEA) | SOIL | LA-508-481 | + - | 0.047 | pCi/g | 1.00 | 0.0 | 03/14/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 13994-20-2 | Neptunium-237 | SOIL | LA-508-471 | U | 1.60e-03 | pCi/g | 1.00 | 2.1e-03 | 03/18/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Np-237 by AEA Total Cntg Error | SOIL | LA-508-471 | + - | 1.6e-03 | pCi/g | 1.00 | 0.0 | 03/18/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 13981-18-3 | Pkutonium-238 | SOIL | LA-508-471 | U | -9.50e-03 | pCi/g | 1.00 | 0.049 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Pu-238 by AEA Total Cntg Error | SOIL | LA-508-471 | + - | 0.026 | pCi/g | 1.00 | 0.0 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | PU-239/240 | Pu-239/240 by AEA | SOIL | LA-508-471 | U | 3.80e-03 | pCi/g | 1.00 | 0.018 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | Pu-239/240 AEA Total Cntg Err | SOIL | LA-508-471 | + - | 9.5e-03 | pCi/g | 1.00 | 0.0 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | U-233/234 | Uranium-233/234 | SOIL | LA-508-471 | | 0.320 | pCi/g | 1.00 | 0.013 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | U-233/234 AEA Total Cntg Error | SOIL | LA-508-471 | + - | 0.096 | pCi/g | 1.00 | 0.0 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | 15117-96-1 | Uranium-235 | SOIL | LA-508-471 | | 0.0220 | pCi/g | 1.00 | 5.3e-03 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | U-235 by AEA Total Cntg Error | SOIL | LA-508-471 | + - | 0.014 | pCi/g | 1.00 | 0.0 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | U-238 | Uranium-238 | SOIL | LA-508-471 | | 0.240 | pCi/g | 1.00 | 4.8e-03 | 03/17/05 03/04/05 03/04/05 |
| W050000860 | B19410 | GRP | TRENT | E,T,C | U-238 by AEA Total Cntg Error | SOIL | LA-508-471 | + - | 0.074 | pCi/g | 1.00 | 0.10 | 03/17/05 03/04/05 03/04/05 |

MDL = Minimum Detection Limit

B - The analyte < the RDL but > = the IDL/MDL (inorganic)

E - Analyte is an estimate, has potentially larger errors

RQ = Result Qualifier

U - Analyzed for but not detected above limiting criteria.

DF = Dilution Factor

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

Report WGPP/ver. 1.1

Groundwater Remediation Program

38
04
55

Page 6

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: Gamma Energy Analysis-grd H₂O

SAF Number: F03-025

Sample Date: 03/04/05

Receive Date: 03/04/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000860

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | | |
|-----|--------------|------------|-----------|--------|-----|----------|-------|--------|--|
| DUP | Cobalt-60 | 10198-40-0 | 5.87e-02 | 15.409 | RPD | 03/14/05 | 0.000 | 20.000 | |
| DUP | Cesium-137 | 10045-97-3 | U2.46e-03 | n/a | RPD | 03/14/05 | 0.000 | 20.000 | |
| DUP | Europium-152 | 14683-23-9 | U-7.91e-3 | n/a | RPD | 03/14/05 | 0.000 | 20.000 | |
| DUP | Europium-154 | 15585-10-1 | 1.78e-01 | 15.106 | RPD | 03/14/05 | 0.000 | 20.000 | |
| DUP | Europium-155 | 14391-16-3 | 1.30e-01 | 45.631 | RPD | 03/14/05 | 0.000 | 20.000 | |

BATCH QC

| | | | | | | | | | |
|-------|--------------|------------|----------|---------|---------|----------|---------|----------|--|
| BLANK | Cobalt-60 | 10198-40-0 | U-4.4e-4 | n/a | pCi/g | 03/07/05 | -10.000 | 1000.000 | |
| BLANK | Cesium-137 | 10045-97-3 | U-8.2e-4 | n/a | pCi/g | 03/07/05 | -10.000 | 1000.000 | |
| BLANK | Europium-152 | 14683-23-9 | U-2.9e-3 | n/a | pCi/g | 03/07/05 | -10.000 | 1000.000 | |
| BLANK | Europium-154 | 15585-10-1 | U-4.2e-3 | n/a | pCi/g | 03/07/05 | -10.000 | 1000.000 | |
| BLANK | Europium-155 | 14391-16-3 | U7.90e-3 | n/a | pCi/g | 03/07/05 | -10.000 | 1000.000 | |
| LCS | Cobalt-60 | 10198-40-0 | 4.38e+03 | 104.535 | % Recov | 03/07/05 | 80.000 | 120.000 | |
| LCS | Cesium-137 | 10045-97-3 | 3.88e+03 | 108.380 | % Recov | 03/07/05 | 80.000 | 120.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: Americium by AEA

SAF Number: F03-025

Sample Date: 03/03/05

Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000833

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | |
|-----|---------------|------------|---------|-------|-----|----------|-------|--------|
| DUP | Americium-241 | 14596-10-2 | 2.7e+00 | 7.692 | RPD | 03/17/05 | 0.000 | 20.000 |
|-----|---------------|------------|---------|-------|-----|----------|-------|--------|

BATCH QC

| | | | | | | | | |
|-------|---------------|------------|----------|--------|---------|----------|---------|----------|
| BLANK | Americium-241 | 14596-10-2 | U4.5e-03 | n/a | pCi/g | 03/17/05 | -10.000 | 1000.000 |
| LCS | Americium-241 | 14596-10-2 | 4.5e+01 | 93.555 | % Recov | 03/18/05 | 75.000 | 125.000 |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: Neptunium by AEA

SAF Number: F03-025
 Sample Date: 03/03/05
 Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|--|---------------|------------|----------|----------|---------|---------------|-------------|-------------|----|
| Lab ID: W050000833 | | | | | | | | | |
| BATCH QC ASSOCIATED WITH SAMPLE | | | | | | | | | |
| DUP | Neptunium-237 | 13994-20-2 | U9.3E-04 | n/a | RPD | 03/18/05 | 0.000 | 25.000 | |
| BATCH QC | | | | | | | | | |
| BLANK | Neptunium-237 | 13994-20-2 | 4.1e-03 | 0.004 | pCi/g | 03/18/05 | -10.000 | 1000.000 | |
| LCS | Neptunium-237 | 13994-20-2 | 40.8 | 40.800 | % Recov | 03/18/05 | 75.000 | 125.000 | |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520

Matrix: SOLID

Test: Plutonium Isotopes by AEA

SAF Number: F03-025

Sample Date: 03/03/05

Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000833

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | |
|-----|-------------------|------------|---------|-------|-----|----------|-------|--------|
| DUP | Pu-239/240 by AEA | PU-239/240 | 8.2e+00 | 3.727 | RPD | 03/17/05 | 0.000 | 20.000 |
|-----|-------------------|------------|---------|-------|-----|----------|-------|--------|

BATCH QC

| | | | | | | | | |
|-------|-------------------|------------|----------|--------|---------|----------|---------|----------|
| BLANK | Pu-239/240 by AEA | PU-239/240 | U1.2e-02 | n/a | pCi/g | 03/17/05 | -10.000 | 1000.000 |
| LCS | Pu-239/240 by AEA | PU-239/240 | 4.7e+01 | 95.528 | % Recov | 03/17/05 | 75.000 | 125.000 |

WSCF ANALYTICAL LABORATORY QC REPORT

SDG Number: WSCF20050520
 Matrix: SOLID
 Test: Uranium Isotopes by AEA

SAF Number: F03-025
 Sample Date: 03/03/05
 Receive Date: 03/03/05

| QC Type | Analyte | CAS # | QC Found | QC Yield | Units | Analysis Date | Lower Limit | Upper Limit | RQ |
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|
|---------|---------|-------|----------|----------|-------|---------------|-------------|-------------|----|

Lab ID: W050000833

BATCH QC ASSOCIATED WITH SAMPLE

| | | | | | | | | |
|-----|-------------|-------|---------|-------|-----|----------|-------|--------|
| DUP | Uranium-238 | U-238 | 1.8e-01 | 0.000 | RPD | 03/17/05 | 0.000 | 20.000 |
|-----|-------------|-------|---------|-------|-----|----------|-------|--------|

BATCH QC

| | | | | | | | | |
|-------|-------------|------------|---------|---------|---------|----------|---------|----------|
| BLANK | Uranium-238 | 24678-82-8 | 1.9e-02 | 0.019 | pCi/g | 03/17/05 | -10.000 | 1000.000 |
| LCS | Uranium-238 | 24678-82-8 | 8.8e+01 | 116.064 | % Recov | 03/17/05 | 75.000 | 125.000 |

WSCF
ANALYTICAL COMMENT REPORT

Attention:
Project Number Steve Trent
 F03-025

Group #: WSCF20050520

| Sample # | Client ID | Lab Area | Test | Comment |
|----------|-----------|----------|------|---|
| | | VALGROUP | | ICP-MS: All preparation blank results are in ug/L (ppb) and sample results are in ug/g (ppm). Sb LCS recovery is within mfg. specifications. Low Ag MSD and MS (low, but acceptable); "E" flag. |
| | | | | IC Ammonia: Low matrix spike recoveries probably due to matrix interference. High concentration of unknown compound elutes from the column at approximately 29 minutes; however, this compound does not directly interfere with the ammonia peak. Sample required dilution to prevent damage to the column. |
| | | | | Eu155 from the GEA test is flagged for poor RPD. Since all the other QC checks came out fine, this batch has been accepted.lmh |
| | | | | Cyanide: Batch QC on other sample shows matrix spikes biased low and spike RPD does not meet acceptance criteria |
| | | | | Organics: Sample concentrations have been corrected for moisture and are reported on a dry weight basis. gsr |
| | | | | Np237 lcs recovery is low so the sample result is an estimated value. lmh |

Lab Areas: VALGROUP - Group Validation
 LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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WSCF
TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent **Group #:** WSCF20050520
Project Number F03-025 :F03-025

| Sample # | Client ID | Test Name | Peak Name | CAS# | RT | RQ | Result | Units |
|------------|-----------|-----------|------------------------|--------------------------------|---------|----------|----------|-------|
| W050000860 | B19410 | GRP TRENT | SW-846 82708 Semi-Vols | SMP 18.504 Di-n-butylphthalate | 84-74-2 | 16.50491 | 2.0e +02 | ug/kg |

RQ=Result Qualifier

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Groundwater Remediation Program

WGPPE v 1.1 Report #: 20050520

Report Date: 5-apr-2005

Page 1

WSCF

METHOD REFERENCES REPORT

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

| | | |
|------------|---|--|
| LA-212-411 | Determination of Soil pH Measurement EPA SW-846 9045C | SOIL AND WASTE pH |
| LA-503-401 | LA-503-401: ANALYSIS OF CATIONS BY ION CHROMATOGRAPHY EPA-600/4-86-024 300.7 | Dissolved Sodium, Ammonium, Potassium, and Calcium in Wet Deposition by Chemical |
| LA-505-411 | LA-505-411: ELEMENTAL ANALYSIS BY INDUCTIVELY COUPLED PLASMA ATOMIC EMISSION SPE EPA SW-846 6010B | INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROMETRY |
| LA-505-412 | LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY EPA-600/R-94-111 200.8 | DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS |
| LA-508-471 | LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP None | No reference to any industry method. |
| LA-508-481 | LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE None | No reference to any industry method. |
| LA-519-412 | LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C EPA-600/4-79-020 160.3 Standard Methods 2540B | RESIDUE, TOTAL Total Solids Dried at 103-105 C |
| LA-523-427 | LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY EPA SW-846 3510C EPA SW-846 3545 | SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION PRESSURIZED FLUID EXTRACTION (PFE) |

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at
\\ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf. This document includes on-line
links to full-text versions of the procedures and methods, where available.

Report Date: 5-apr-2005

Report #: WSCF20050520

Report WGPPM/0

Page 1

WSCF

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| | | |
|------------|---|--|
| | EPA SW-846 3665A | SULFURIC ACID/PERMANGANATE CLEANUP |
| | EPA SW-846 8000B | DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS |
| | EPA SW-846 8082 | POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY |
| LA-523-443 | LA-523-443: GAS CHROMATOGRAPH ANALYSIS OF GASOLINE RANGE TOTAL PETROLEUM HYDROCARBONS WDOE TPH NWTPH-G | Volatile Petroleum Products Method for Soil and Water |
| LA-523-455 | LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846 | |
| | EPA SW-846 8000B | DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS |
| | EPA SW-846 8260B | VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS) |
| LA-523-456 | LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C | |
| | EPA SW-846 8000B | DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS |
| | EPA SW-846 8270C | SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS) |
| LA-533-410 | LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY | |
| | EPA-600/R-94-111 300 | DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY |
| LA-695-402 | LA-695-402: DETERMINATION OF CYANIDE BY MIDIDISTILLATION AND SPECTROPHOTOMETRIC | |
| | EPA-600/4-79-020 335.2 | Cyanide, Total |
| NWTPH | NWTPH-Diesel and/or Gasoline | |
| | WDOE NWTPH-Dx/Gx | Total Petroleum Hydrocarbons - Diesel/Gasoline |
| Organics | Organics - Alcohols, Glycols | |

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at
<\\ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf>. This document includes on-line
links to full-text versions of the procedures and methods, where available.

Report Date: 5-apr-2005
Report #: WSCF20050520
Report WGPPM/0

WSCF

METHOD REFERENCES REPORT

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EPA SW-846 8015B

Nonhalogenated Organics Using GC/FID

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at <\\ap006\aspdocs\WSCF\Sample Mgmt\ProcedureMethodCrossReference.pdf>. This document includes on-line links to full-text versions of the procedures and methods, where available.

Report Date: 5-apr-2005

Report #: WSCF20050520

Report WGPPM/0

Page 3

W13q Worklist/Batch/QC Report for Group# WSCF20050520

| WL# | S# | Batch | QC# | Tray | Type | Sample# | Test |
|-------|----|-------|-----------|---------|------------|------------|--------------------------------|
| | | | | SAMPLE | | W050000860 | Percent Solids |
| | | 29035 | DUP | | | W050000833 | pH Soil and Waste Measurement |
| | | 29035 | SAMPLE | | | W050000860 | pH Soil and Waste Measurement |
| 25288 | 13 | 25657 | 29052 | BLANK | | | ICP-2008 MS All possible metal |
| 25288 | 14 | 25657 | 29052 | LCS | | | ICP-2008 MS All possible metal |
| 25288 | 16 | 25657 | 29052 | MS | | W050000835 | ICP-2008 MS All possible metal |
| 25288 | 17 | 25657 | 29052 | MSD | | W050000835 | ICP-2008 MS All possible metal |
| 25288 | 0 | 25657 | 29052 | SPK-RPD | | W050000835 | ICP-2008 MS All possible metal |
| 25288 | 19 | 25657 | 29052 | SAMPLE | | W050000860 | ICP-2008 MS All possible metal |
| 25295 | 1 | 25664 | 29055 | BLANK | | | ICP Metals Analysis, Grd H2O P |
| 25295 | 2 | 25664 | 29055 | LCS | | | ICP Metals Analysis, Grd H2O P |
| 25295 | 13 | 25664 | 29055 | MS | | W050000833 | ICP Metals Analysis, Grd H2O P |
| 25295 | 14 | 25664 | 29055 | MSD | | W050000833 | ICP Metals Analysis, Grd H2O P |
| 25295 | 0 | 25664 | 29055 | SPK-RPD | | W050000833 | ICP Metals Analysis, Grd H2O P |
| 25295 | 16 | 25664 | 29055 | SAMPLE | | W050000860 | ICP Metals Analysis, Grd H2O P |
| 25306 | 2 | 25673 | 29060 | BLANK | | | Anions by Ion Chromatography |
| 25306 | 12 | 25673 | 29060 | BLANK | | | Anions by Ion Chromatography |
| 25306 | 3 | 25673 | 29060 | LCS | | | Anions by Ion Chromatography |
| 25306 | 5 | 25673 | 29060 | DUP | | W050000473 | Anions by Ion Chromatography |
| 25306 | 6 | 25673 | 29060 | MS | | W050000473 | Anions by Ion Chromatography |
| 25306 | 7 | 25673 | 29060 | MSD | | W050000473 | Anions by Ion Chromatography |
| 25306 | 11 | 25673 | 29060 | SAMPLE | | W050000860 | Anions by Ion Chromatography |
| | | 29097 | BLANK | | | | Cyanide by Midi/Spectrophotom |
| | | 29097 | BLNK-PREP | | | | Cyanide by Midi/Spectrophotom |
| | | 29097 | LCS | | | | Cyanide by Midi/Spectrophotom |
| | | 29097 | MS | | W050000710 | | Cyanide by Midi/Spectrophotom |
| | | 29097 | MSD | | W050000710 | | Cyanide by Midi/Spectrophotom |
| | | 29097 | SPK-RPD | | W050000710 | | Cyanide by Midi/Spectrophotom |
| | | 29097 | SAMPLE | | W050000860 | | Cyanide by Midi/Spectrophotom |
| 25282 | 1 | 25648 | 29111 | BLANK | | | Gamma Energy Analysis-grd H2O |
| 25282 | 2 | 25648 | 29111 | LCS | | | Gamma Energy Analysis-grd H2O |
| 25282 | 3 | 25648 | 29111 | DUP | | W050000860 | Gamma Energy Analysis-grd H2O |
| 25282 | 4 | 25648 | 29111 | SAMPLE | | W050000860 | Gamma Energy Analysis-grd H2O |
| | | 29121 | BLANK | | | | PCBs complete list |
| | | 29121 | LCS | | | | PCBs complete list |
| | | 29121 | MS | | W050000860 | | PCBs complete list |
| | | 29121 | MSD | | W050000860 | | PCBs complete list |
| | | 29121 | SAMPLE | | W050000860 | | PCBs complete list |
| | | 29121 | SPK-RPD | | W050000860 | | PCBs complete list |
| | | 29121 | SURR | | W050000860 | | PCBs complete list |
| | | 29125 | BLANK | | | | SW-846 8270B Semi-Vols |
| | | 29125 | LCS | | | | SW-846 8270B Semi-Vols |
| | | 29125 | MS | | W050000860 | | SW-846 8270B Semi-Vols |
| | | 29125 | MSD | | W050000860 | | SW-846 8270B Semi-Vols |
| | | 29125 | SAMPLE | | W050000860 | | SW-846 8270B Semi-Vols |
| | | 29125 | SPK-RPD | | W050000860 | | SW-846 8270B Semi-Vols |

| | | | | |
|-------|---------|---------|------------|------------------------------|
| | 29125 | SURR | W050000860 | SW-846 8270B Semi-Vols |
| | 29145 | BLANK | | WTPH-D TPH Diesel Range (Wa) |
| | 29145 | LCS | | WTPH-D TPH Diesel Range (Wa) |
| | 29145 | MS | W050000860 | WTPH-D TPH Diesel Range (Wa) |
| | 29145 | MSD | W050000860 | WTPH-D TPH Diesel Range (Wa) |
| | 29145 | SAMPLE | W050000860 | WTPH-D TPH Diesel Range (Wa) |
| | 29145 | SPK-RPD | W050000860 | WTPH-D TPH Diesel Range (Wa) |
| | 29145 | SURR | W050000860 | WTPH-D TPH Diesel Range (Wa) |
| 25372 | 1 25736 | 29171 | BLANK | Neptunium by AEA |
| 25372 | 2 25736 | 29171 | LCS | Neptunium by AEA |
| 25372 | 3 25736 | 29171 | DUP | Neptunium by AEA |
| 25372 | 6 25736 | 29171 | SAMPLE | Neptunium by AEA |
| 25386 | 1 25754 | 29179 | BLANK | Uranium Isotopics by AEA |
| 25386 | 2 25754 | 29179 | LCS | Uranium Isotopics by AEA |
| 25386 | 3 25754 | 29179 | DUP | Uranium Isotopics by AEA |
| 25386 | 6 25754 | 29179 | SAMPLE | Uranium Isotopics by AEA |
| 25387 | 1 25753 | 29208 | BLANK | Plutonium Isotopics by AEA |
| 25387 | 2 25753 | 29208 | LCS | Plutonium Isotopics by AEA |
| 25387 | 3 25753 | 29208 | DUP | Plutonium Isotopics by AEA |
| 25387 | 6 25753 | 29208 | SAMPLE | Plutonium Isotopics by AEA |
| 25388 | 1 25752 | 29209 | BLANK | Americium by AEA |
| 25388 | 2 25752 | 29209 | LCS | Americium by AEA |
| 25388 | 3 25752 | 29209 | DUP | Americium by AEA |
| 25388 | 6 25752 | 29209 | SAMPLE | Americium by AEA |
| 25437 | 2 25803 | 29213 | BLANK | Ammonia (N) by IC |
| 25437 | 8 25803 | 29213 | BLANK | Ammonia (N) by IC |
| 25437 | 3 25803 | 29213 | LCS | Ammonia (N) by IC |
| 25437 | 5 25803 | 29213 | DUP | Ammonia (N) by IC |
| 25437 | 6 25803 | 29213 | MS | Ammonia (N) by IC |
| 25437 | 7 25803 | 29213 | MSD | Ammonia (N) by IC |
| 25437 | 4 25803 | 29213 | SAMPLE | Ammonia (N) by IC |
| 25584 | 1 25951 | 29383 | BLANK | NWTPH-GX TPH Gasoline Range |
| 25584 | 2 25951 | 29383 | LCS | NWTPH-GX TPH Gasoline Range |
| 25584 | 4 25951 | 29383 | DUP | NWTPH-GX TPH Gasoline Range |
| 25584 | 5 25951 | 29383 | MS | NWTPH-GX TPH Gasoline Range |
| 25584 | 6 25951 | 29383 | MSD | NWTPH-GX TPH Gasoline Range |
| 25584 | 6 25951 | 29383 | SPK-RPD | NWTPH-GX TPH Gasoline Range |
| 25584 | 9 25951 | 29383 | SAMPLE | NWTPH-GX TPH Gasoline Range |
| | | 29385 | BLANK | VOA Ground Water Protection |
| | | 29385 | LCS | VOA Ground Water Protection |
| | | 29385 | MS | VOA Ground Water Protection |
| | | 29385 | MSD | VOA Ground Water Protection |
| | | 29385 | SPK-RPD | VOA Ground Water Protection |
| | | 29385 | SAMPLE | VOA Ground Water Protection |
| | | 29385 | SURR | VOA Ground Water Protection |
| 25590 | 1 25957 | 29387 | BLANK | Alcohols, Glycols - 8015 |
| 25590 | 2 25957 | 29387 | LCS | Alcohols, Glycols - 8015 |
| 25590 | 4 25957 | 29387 | DUP | Alcohols, Glycols - 8015 |
| 25590 | 5 25957 | 29387 | MS | Alcohols, Glycols - 8015 |
| 25590 | 6 25957 | 29387 | MSD | Alcohols, Glycols - 8015 |
| 25590 | 3 25957 | 29387 | SAMPLE | Alcohols, Glycols - 8015 |

25590 6 25957 29387 SPK-RPD W050000860 Alcohols, Glycols - 8015

*F
V*

Waste Sampling and Characterization Facility
 P.O. BOX 1970 S3-30, Richland, WA 99352
 PHONE: (509) 373-7004/FAX: (509) 373-7134

4/4/05

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
 Attn: Steve Trent

Customer Code: GPP
 PO#: 119143/ES10
 Group#: 20050520
 Project#: F03-025
 Proj Mgr: Steve Trent A0-21
 Phone: 373-5869

The following samples were received from you on 03/04/05. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

| Sample# | Sample Id | Matrix | Sample Date |
|------------|-----------|--|-------------|
| | | Tests Scheduled | |
| W050000860 | B19410 | GRP TRENT Solid, or handle as if solid | 03/04/05 |
| | | @2008 @8015GPP @AEA-30 @AEA-31 @AEA-32 | |
| | | @AEA-33 @GEA-GPP @GPP6010 @IC-30 @PCBGPP @SVOC | |
| | | @TPHD-WA @TPHG-WA @VOA-GPP CN-02 NH4-IC PERSO | |
| | | PH-30 | |

Test Acronym Description

Test Acronym Description

| | |
|----------|--------------------------------|
| @2008 | ICP-2008 MS All possible metal |
| @8015GPP | Alcohols, Glycols - 8015 |
| @AEA-30 | Plutonium Isotopics by AEA |
| @AEA-31 | Americium by AEA |
| @AEA-32 | Uranium Isotopics by AEA |
| @AEA-33 | Neptunium by AEA |
| @GEA-GPP | Gamma Energy Analysis-grd H2O |
| @GPP6010 | ICP Metals Analysis, Grd H2O P |
| @IC-30 | Anions by Ion Chromatography |
| @PCBGPP | PCBs complete list |
| @SVOCGPP | SW-846 8270B Semi-Vol |
| @TPHD-WA | WTPH-D TPH Diesel Range (Wa) |
| @TPHG-WA | NWTPH-GX TPH Gasoline Range |
| @VOA-GPP | VOA Ground Water Protection |
| CN-02 | Cyanide by Midi/Spectrophotom |
| NH4-IC | Ammonia (N) by IC |
| PERSOLID | Percent Solids |
| PH-30 | pH Soil and Waste Measurement |

| CHAIN OF CUSTODY / SAMPLE ANALYSIS REQUEST | | | | | | | | | | PAGE 1 OF 2 | |
|--|--|---|--|---|--|---|--|---|--|---|--|
| COLLECTOR POPE/PIPER/Tyvnehberg | | COMPANY CONTACT TRENT, STEVE | | TELEPHONE NO. 373-5659 | | PROJECT COORDINATOR TRENT, SJ | | PRICE CODE PRD-025 | | DATA TURNAROUND 45 Days / 45 Days | |
| SAMPLING LOCATION 246-27; 117-58-120R | | FIELD LOGBOOK NO. HNF-N-356-1 | | COA 11914363510 | | SAF. NO. PRD-025 | | METHOD OF SHIPMENT Government Vehicle | | BILL OF LADING/AIR BILL NO. NA | |
| SHIPPED TO Waste Sampling & Characterization | | SAMPLE NO. 20050520 | | SAMPLE DATE 3/4/05 | | SAMPLE TIME 0930 | | TIME | | TITLE | |
| MATRIX ^a N/A | | POSSIBLE SAMPLE HAZARDS/ REMARKS | | PRESERVATION | | CONTAINER ^b | | CONTAINER ^b | | CONTAINER ^b | |
| A-N Drum Liquids | | TYPE OF CONTAINER | | CONTAINER ^b | | CONTAINER ^b | | CONTAINER ^b | | CONTAINER ^b | |
| D-S Drum L-Solid Ouch S-Sol SE-Gel/ment T-Tissue V-Vapors W-Water X-Other | | NO. OF CONTAINERS(S) | | 1 | | 1 | | 1 | | 1 | |
| | | VOLUME | | 40mL | | 120mL | | 120mL | | 120mL | |
| SPECIFIC HANDLING AND/OR STORAGE | | SAMPLE ANALYSIS | | SEE ITEM (1) IN SPEC. INSTR. | | SEE ITEM (2) IN SPEC. INSTR. | | SEE ITEM (3) IN SPEC. INSTR. | | SEE ITEM (4) IN SPEC. INSTR. | |
| SAMPLE NO. B19410 | | NAME ^c | | RECEIVED BY/STORED IN K. Botes DATE/TIME 3/4/05 1640 | |
| CHAIN OF POSSESSION | | SIGN/ PRINT NAMES | |
| RElinquished by/removed from David T. Cole 3/4/05 1640 | | RECEIVED BY/STORED IN K. Botes DATE/TIME 3/4/05 1640 | | RECEIVED BY/STORED IN K. Botes DATE/TIME 3/4/05 1640 | | RECEIVED BY/STORED IN K. Botes DATE/TIME 3/4/05 1640 | | RECEIVED BY/STORED IN K. Botes DATE/TIME 3/4/05 1640 | | RECEIVED BY/STORED IN K. Botes DATE/TIME 3/4/05 1640 | |
| RElinquished by/removed from | | DATE/TIME | |
| RElinquished by/removed from | | DATE/TIME | |
| RElinquished by/removed from | | DATE/TIME | |
| RElinquished by/removed from | | DATE/TIME | |
| RElinquished by/removed from | | DATE/TIME | |
| LABORATORY SECTION | | RECEIVED BY | | DISPOSAL METHOD | | TITLE | | DATE/TIME | | DATE/TIME | |
| FINAL SAMPLE DISPOSITION | | | | | | | | | | | |
| SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS | | | | | | | | | | | |
| SPECIAL INSTRUCTIONS | | | | | | | | | | | |

